Solar Photovoltaic Panel

The sun is an ample source of energy. Advanced technology has made it possible to convert light energy from the sun into electricity. This method of power generation is gaining popularity all over the world because there is no pollution and the source of the energy is renewable. To encourage more households and small businesses into using power from renewable sources of energy, the United Kingdom government is providing a lot of encouragement through rebates and feed-in-tariffs. Electricity that is generated from renewable sources and fed back to the national electricity grid will be paid for by the government.

Solar photovoltaic panels installed as part of the solar power system in your household can thus help to reduce the monthly energy charges. The incentives paid by the government vary according to the technology that is used. It is also important to note that any new solar power system installation should be designed and deployed by a Micro generation Certification Scheme (MCS) accredited installer to qualify for receiving the government's incentives.

The three types of **photovoltaic solar panels** that are available are mono-crystalline, multi-crystalline and amorphous. Though they are all made of silicon, the difference is in the treatment of silicon and the method used to create the solar cells.

If you have a 2kW photovoltaic installation on the roof of your household, it can be safely assumed that you will use half the amount of electricity generated and feed the other half to the national grid. The government pays you an amount for every kW/h fed into the grid and as a result the conventional electricity charges reduce because of the self generation.

With the help of the installer, it is important to choose a location, either on the roof or space on the ground, where there is unobstructed sunlight for a major part of the day. Only daylight is required to create the electricity, not sunshine The maximum efficiency is obtained (in the UK) when solar panels are mounted on a roof that faces the south at an angle of 30 degrees to the horizontal.

It is important to choose solar panels of the highest quality for the household solar power system. Cheaper panels may cut down the set-up costs in the initial stage; however, such panels always run the risk of catching fire and may cause electrocution.

The number of solar panels that need to be purchased for the household depends on factors such as the rating of the power system that is required, the load that is to be connected, the space that is available for mounting the panels and the amount of money that is willing to be spent by the household to set up the system. A solar panel of 1.5 kW rating usually occupies an area of around 12 square meters.

On completely setting up the solar power system, the MCS accredited installer will organize the paperwork that is required to receive all the benefits from the government feed-in-tariffs.